Chinese Outwards Mercantilism – the Art and Practice of Bundling

December 11, 2015

14th Research Meeting of NIPFP-DEA Research Program

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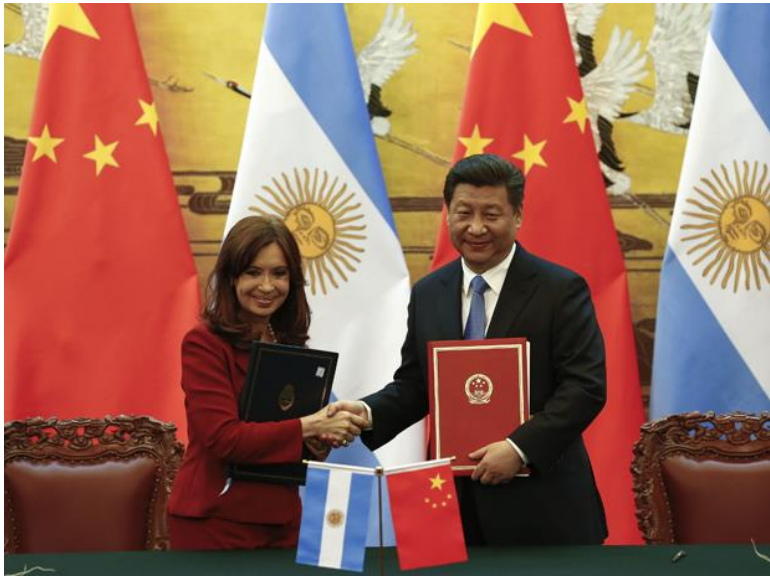


2014: Argentina activated the swap line, and has since drawn a reported $2.7 billion of an available $11 billion. **China's RMB Swap Lines with Latin America by Shannon K. O'Neil, May 28, 2015**

China And Argentina Are At 'A Historic Crossroads' In Their Trade Partnership ***Business Insider, July 19, 2014***

http://www.businessinsider.com/china-and-argentina-are-at-a-historic-crossroads-2014-7

The two countries announced Chinese plans for huge investment in hydroelectric power, shipbuilding, railways and a deal to help Argentina build its fourth nuclear plant.

China will contribute $4.4 billion toward the construction of two hydroelectric dams in Argentina's southern Santa Cruz province and an additional $2.1 billion to remodel strategic rail transportation for carrying goods, especially food.

Key points

1. China - a prime example of export-led growth, benefiting from learning by doing, adopting foreign know-how, supported by a complex industrial policy - modern mercantilism.

2. The pre GFC growth was spectacular, but it came with growing costs, including the negative returns on its NFA.

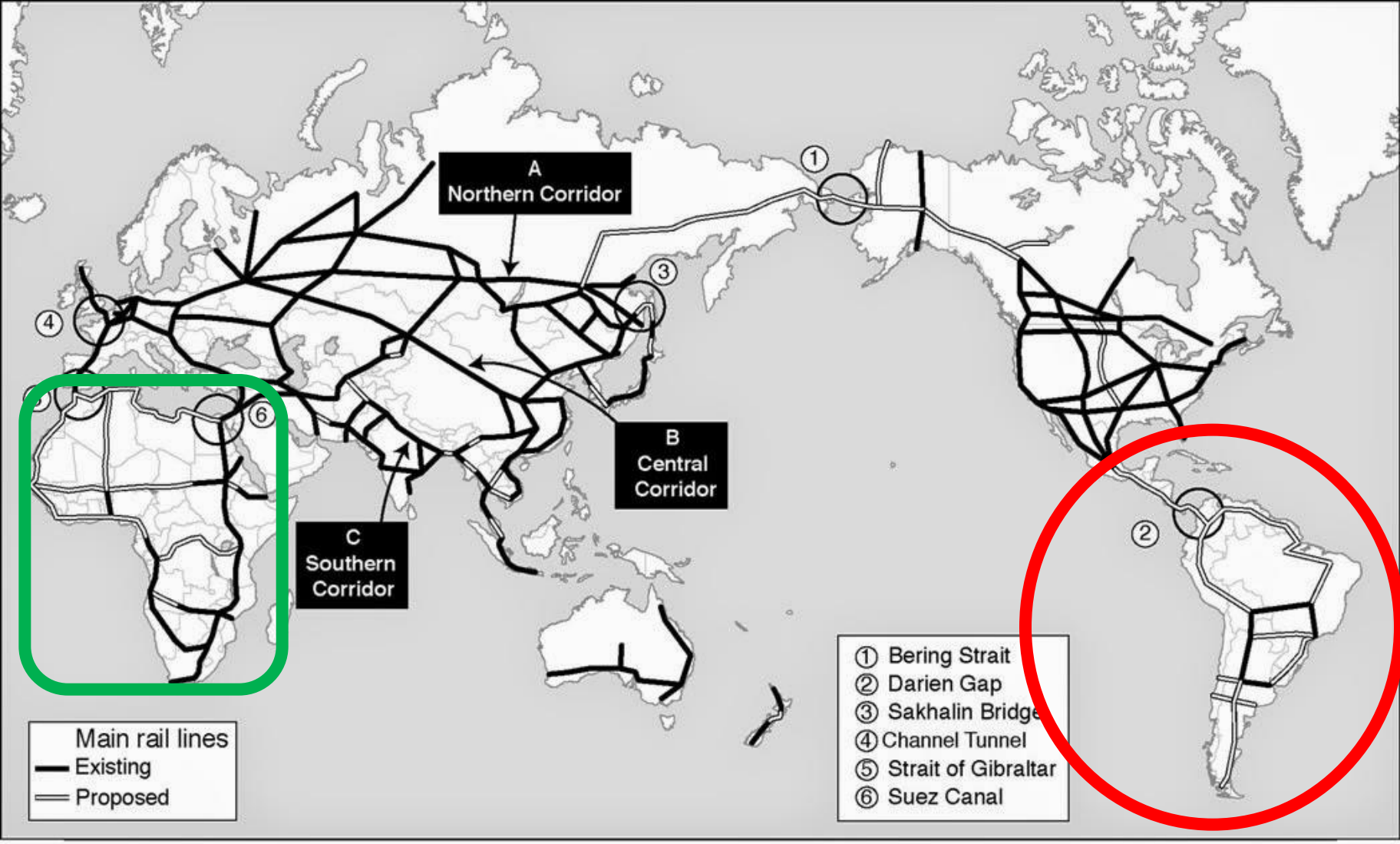
3. The Chinese export-led growth path has been challenged by its own success, the GFC forced China toward rebalancing.

4. A switch from export-led growth strategy to outward FDI and export of services, bundled with exporting Chinese finance, labor services, and capital goods. *China is willing to finance and build. This would allow China to maintain high levels of export of goods and services, using its excess capacity.*

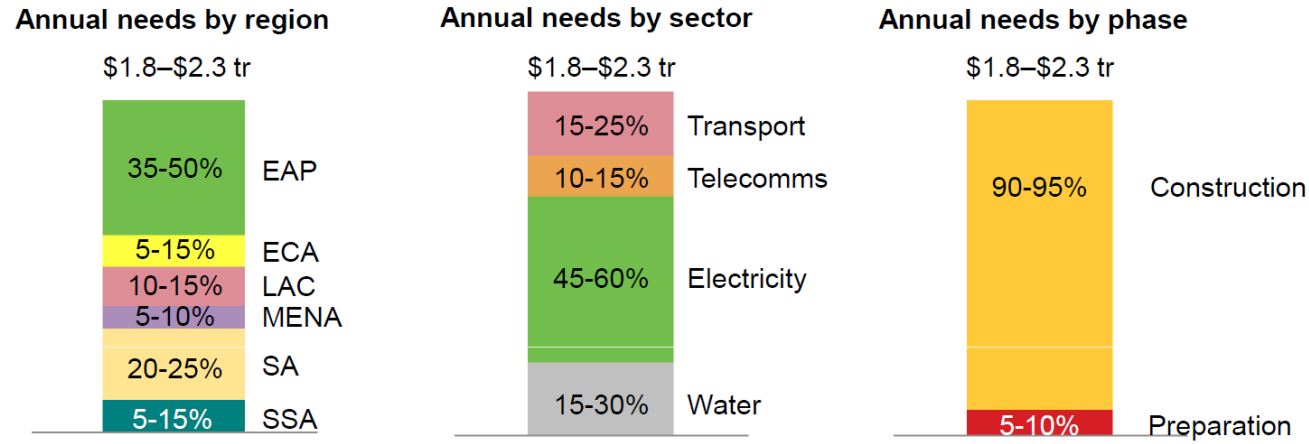
government negotiated agreements to build 34,700 km of high-speed railways for other countries

The potential market for Chinese high-speed railway construction companies is approximately 69,400 km [43000 miles] in overall high speed track length, or 15 trillion yuan (US$2.4 trillion) in total investment, of which, train sales account for 1-1.5 trillion yuan (US$160-$240 billion).

http://nextbigfuture.com/2015/03/if-ipo-can-raise-100-million-then-5.html


A
Northern Corridor
B
Central
Corridor
C
Southern
Corridor
Main rail lines
Existing
Proposed
① Bering Strait
② Darien Gap
③ Sakhalin Bridge
④ Channel Tunnel
⑤ Strait of Gibraltar
⑥ Suez Canal

Need for investment across developing and emerging markets over the next decade is estimated to be around $2 trillion a year, ~$1 trillion more than what is currently spent



NOTE: $ trillion per year, (2008 real prices), capital investments only (excl. operation and maintenance costs); note the $200-300 billion annual requirement for sustainability is assumed split in the same ratio as the other investments across regions, sectors and phases

SOURCE: G-24 & GGGI analysis, based on Yepes (2008), MDB G20 working group on infrastructure (2011), and Foster and Briceño-Garmendia (2010);

5

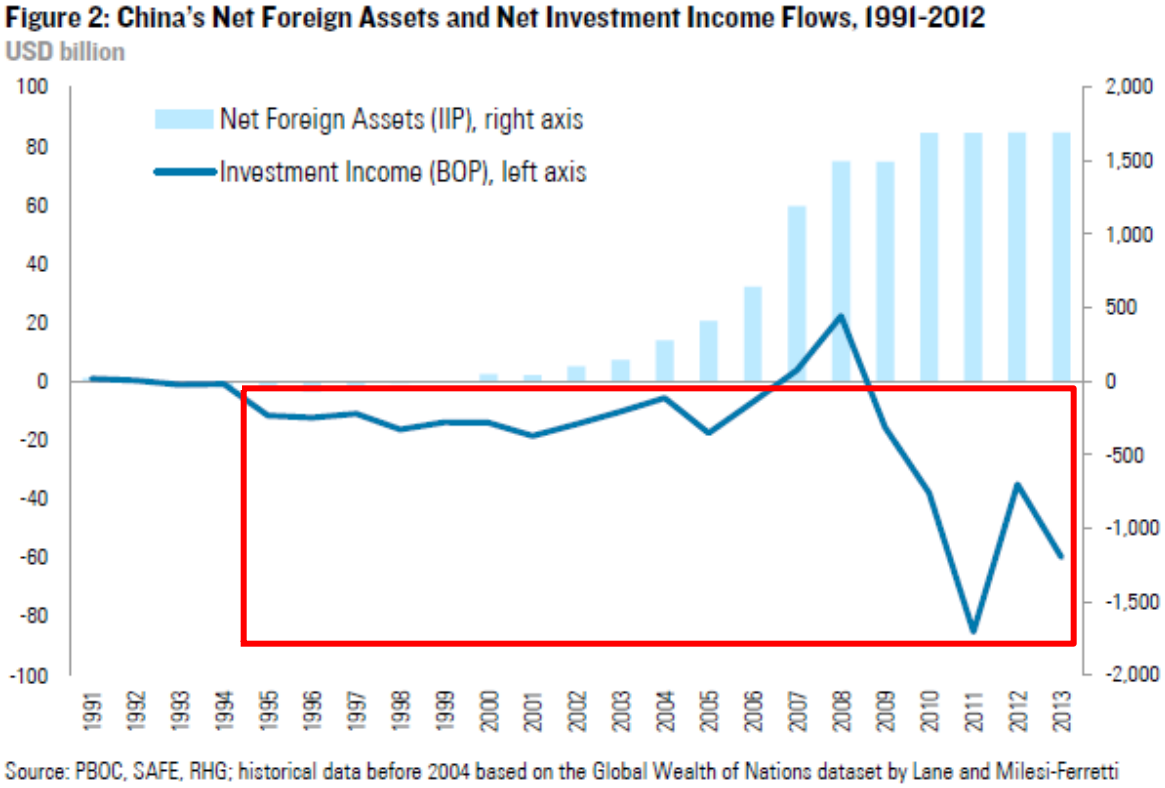
There are trs. of dollars needed to build a shortfall of global infrastructure. China is willing to finance and build. It will solve the problem of how will China still have high levels of investment driven GDP growth.

6

Chinese Net Foreign Asset position: indicative of serious problems
Long on low yielding assets [IR]
Short on high yielding assets [FDI]

		Sep-14		Trillion US $		
	Assets	%	Liabilities	%	Net F. Asset Position	
Total	6.3		4.5		1.8	Total
FDI	0.65	11%	2.55	57%	-1.9	FDI claims
Inter. Reserves	3.95	63%				

The outcome: negative net return on China's NFA position



The yield on China's IR is low → the rate of return on China's overseas assets in 2013 was only 3%. Foreigners, on the other hand, mostly hold FDI assets in China, which helped to sustain the implied return on foreign assets in China at 7 % during the same period of time.

Source: http://rhg.com/notes/chinas-international-investment-position-2014-update

A possible solution: gradual rotation from low yielding IR, to higher expected yielding foreign equity and outward FDI. We detect the beginning of this trend in the past 7 years, but…

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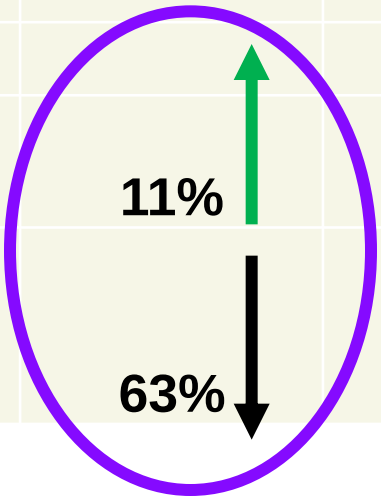
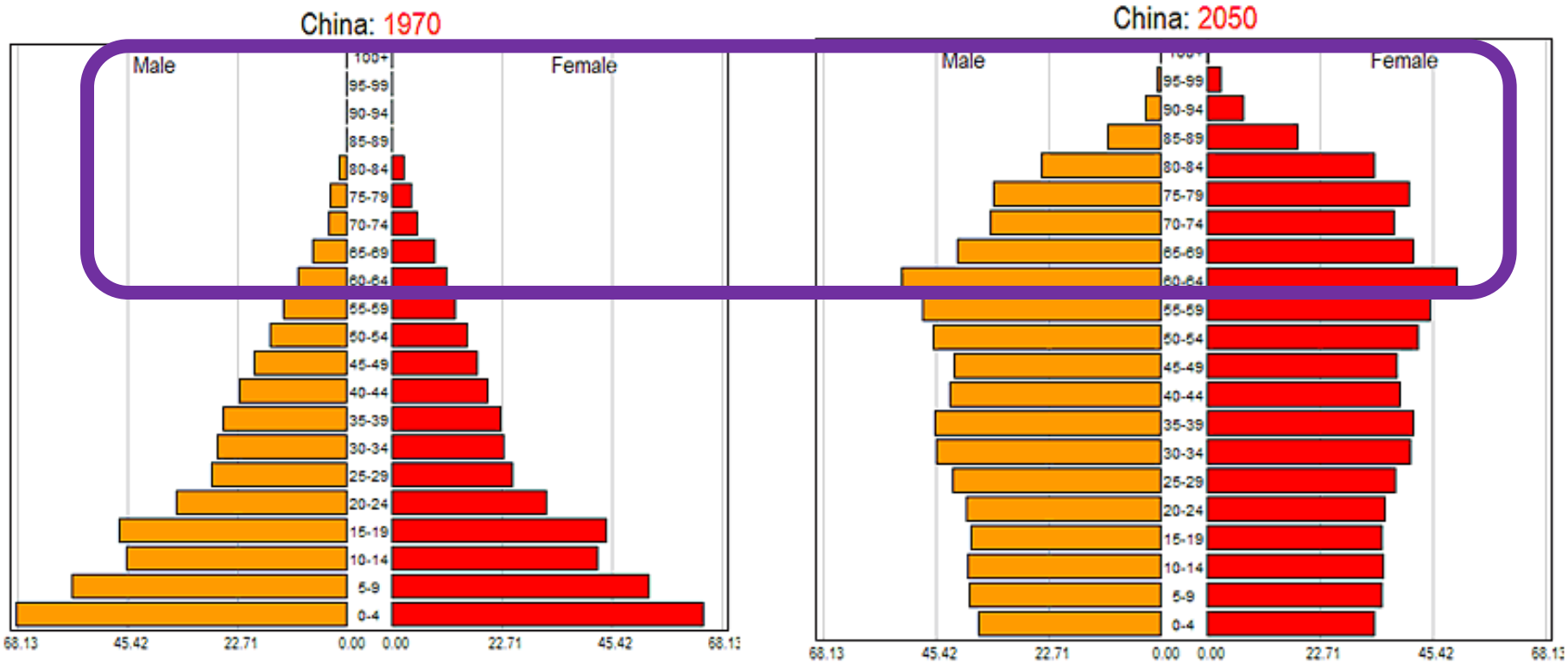


The problem

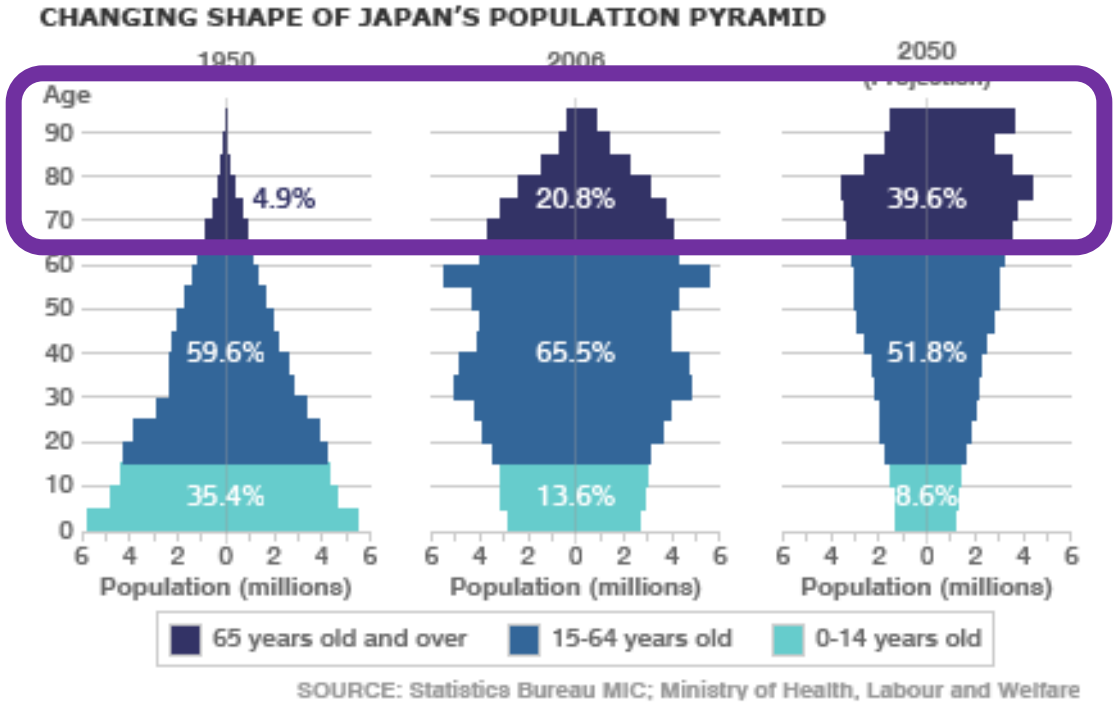
NFA/GDP of China is 20%.

The net income of Chinese NFA is negative. A serious issue in aging society.

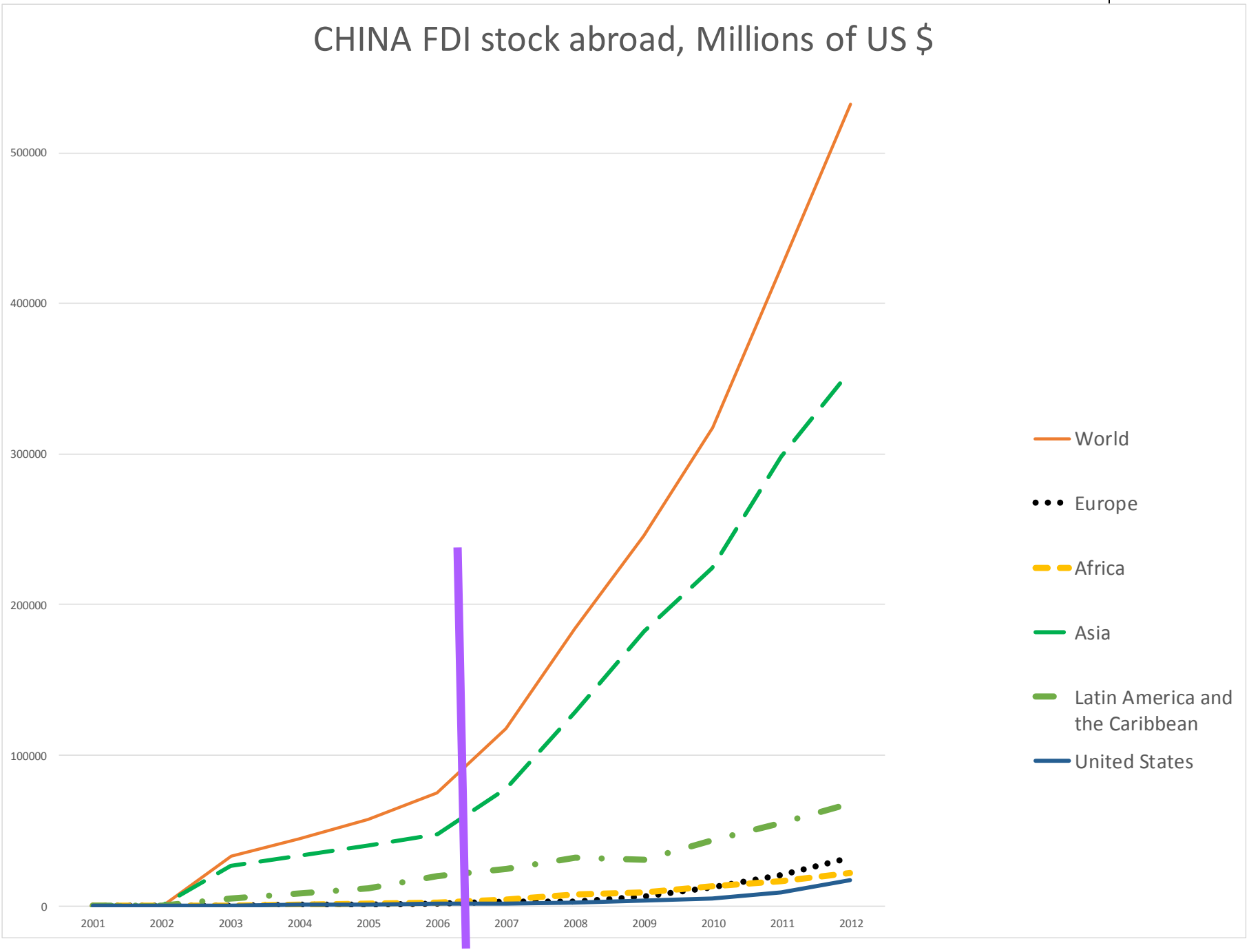


China will age before getting affluent enough to support the glut of 65+

China follows with a lag Japan's aging:



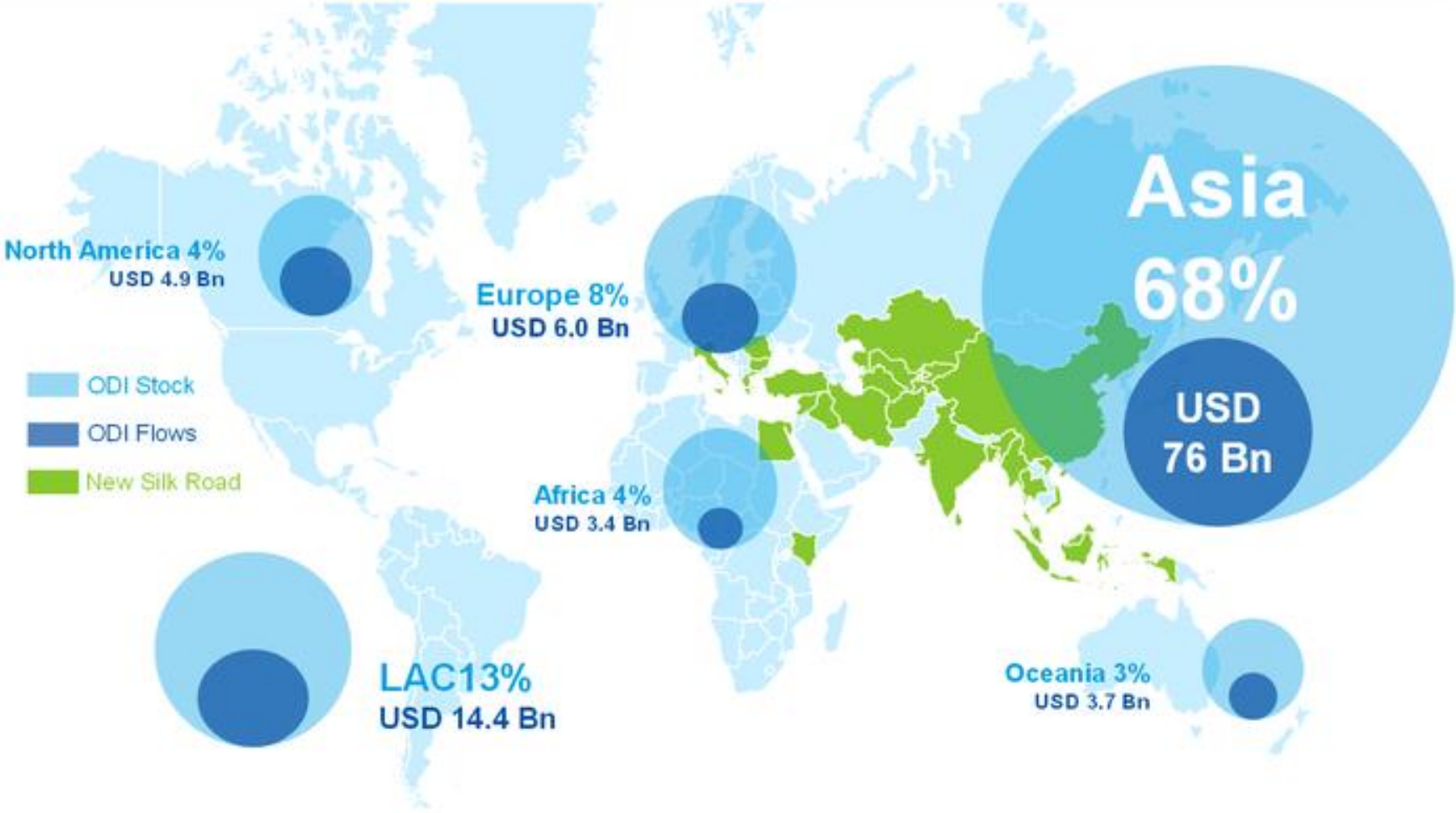
Yet, Japan's NFA/GDP position is about 55%, Yielding a much higher return on its NFA.



Source: UNCTAD FDI/TNC database, based on data from the Ministry of Commerce (MOFCOM).

Figure 3a

Distribution of Chinese ODI flows and stocks according to MOFCOM (2013)



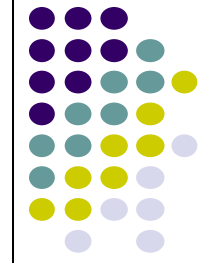
Source: MOFCOM, NBS, SAFE and BBVA Research; Note: The bubbles are indicative and do not exactly represent the size of ODI flows and stocks.

1. Overview 2000-

- China has been a prime example of export led growth, benefiting from learning by doing, and by adopting foreign knowhow, supported by a complex industrial policy.

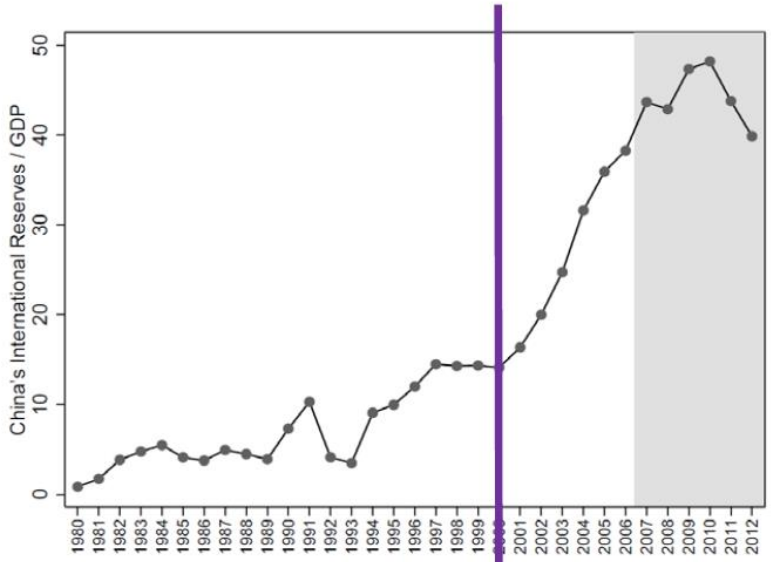
1. Controlled openness.
2. Internal financial repression, with preferential treatment of the SOE.
3. Welcoming FDI and join venture inflows, subject to China's rules of the game.
4. A Modern version of mercantilism. Massive hoarding of IR - policy aiming at delaying the on set of real appreciation, with massive sterilization of expending trade surpluses and financial inflows.

Overview 2000 - cont.

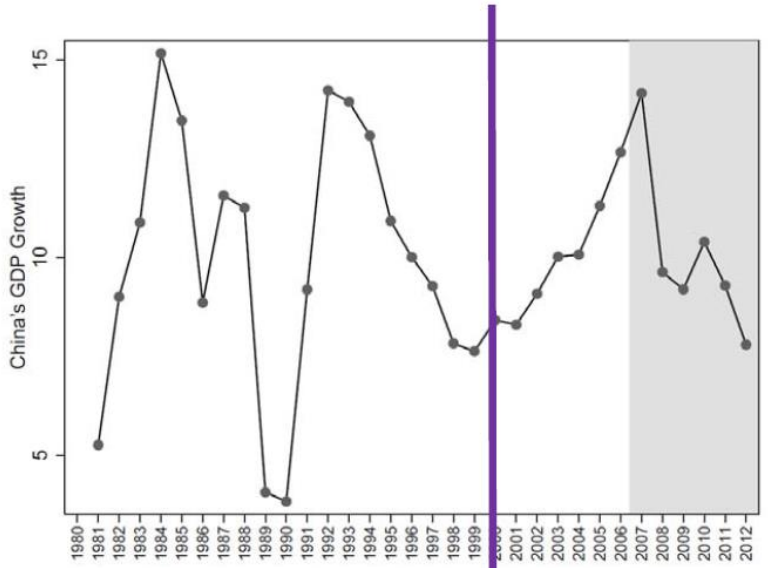


- While the resultant growth has been spectacular, it comes with its hidden but growing costs and distortions.
- Chinese export led growth path has been challenged by its own success.
- The GFC forced rebalancing – a work in progress.
- Post GFC, Chinese authorities put the internalization of the CNY as a top priority.

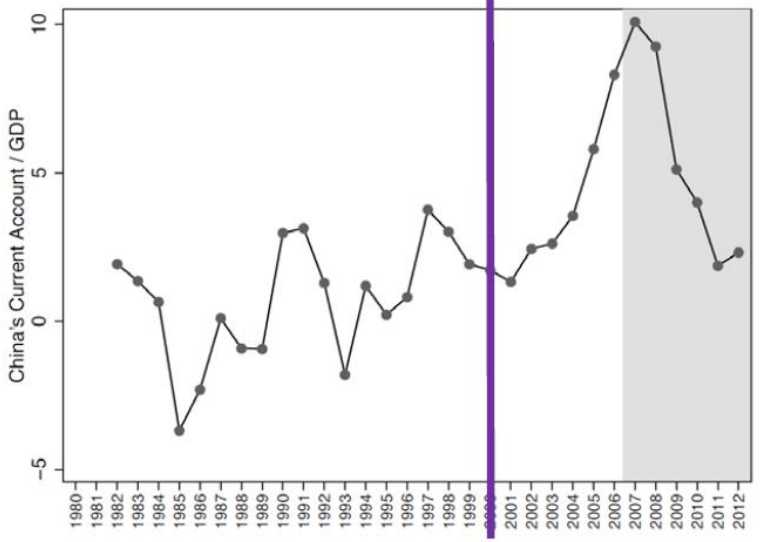
The results: unprecedented

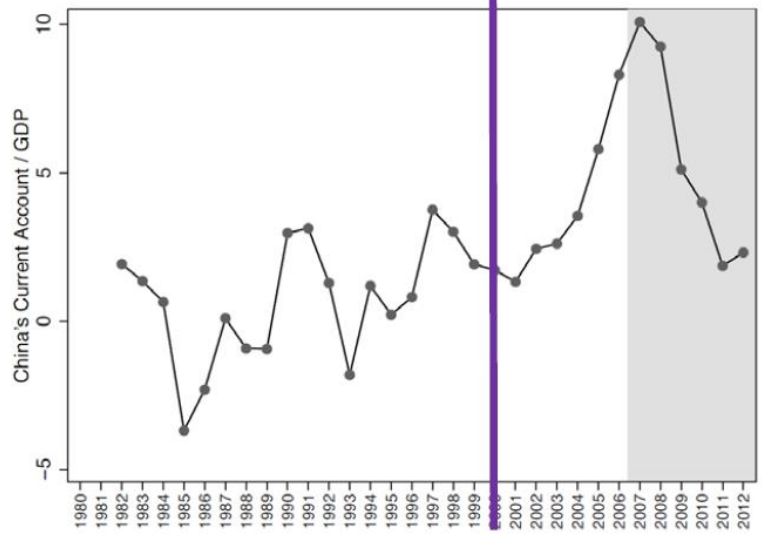


IR/GDP



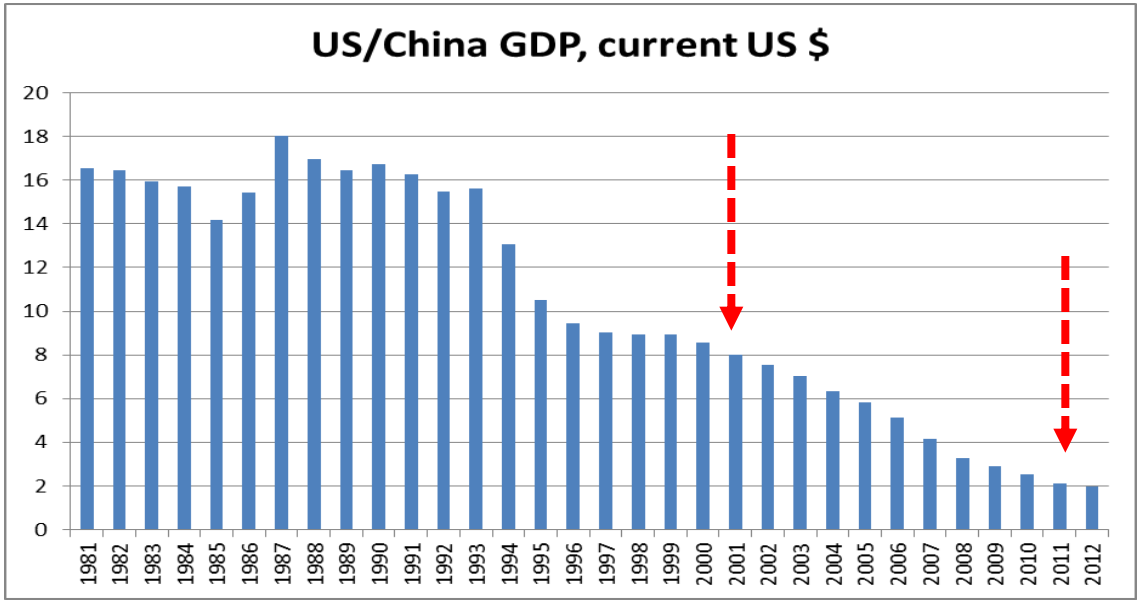
GDP Growth

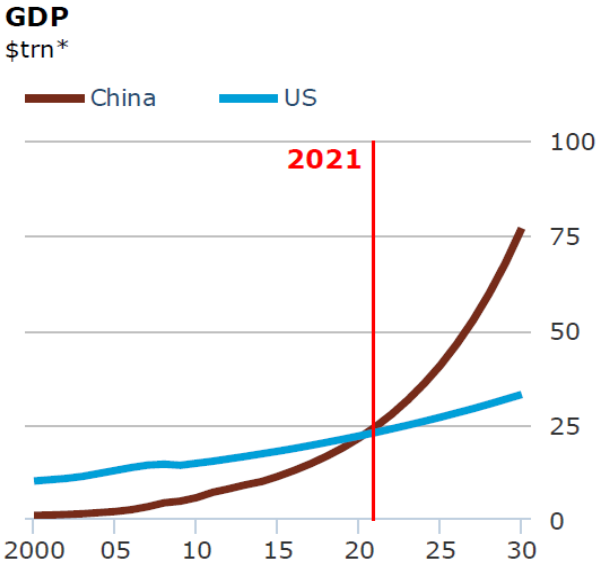




Current account/GDP

China's relative size





Projections of the sizes of China and the US [at current prices and market exchange rates]
The Economist, 2014

Size matters: The logic: the global budget constraint

The length of current account deficit spells is negatively related to the relative size of the countries' GDP.

- The continuation of the fast growth rate of China, while maintaining its large current account/GPD surpluses, would be constrained by the limited sustainability of the larger current account deficits/GDP of countries that grow at a much slower rate.
- **Short of the emergence of a new "demander of last resort," the Chinese growth path would be challenged by its own success.**

Aizenman and Jinjarak (2009). The USA as the 'Demander of Last Resort'and the Implications for China's Current Account. *Pacific Economic Review*, *14*(3), 426-442.

Aizenman and Sun (*Journal of Macroeconomics*, 2010; NBER WP 13734)

2. Swap lines

- Over the past 5 years, China has strongly intensified its efforts to promote the internationalization of the RMB (CNY).
- This agenda - one of the main aspects of the country's economic policy as expressed in the 12th Five- Year Plan (2011-2015).

The Plan supports the expansion of the cross-border use of RMB + the gradual realization of capital account convertibility.

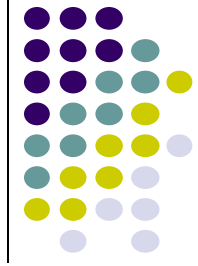
- The Plan supports the development of HK as a major offshore RMB market.

The internationalization process was put into effect through:

- bilateral currency swap agreements with other countries; after the financial crisis in 2008, China has signed swap agreements with countries such as Argentina, Belarus, Iceland, NZ, Turkey, and United Arab Emirates, and others.

Table 1 Swap lines provided by the U.S. FED (billion USD), the ECB (billion Euro), and the PBOC (billion Yuan), 12_2007 to 10_2014, subject to data availability. Source: Aizenman et al. (2014).

ds_code	wb_code	Country	FED_USD	ECB_EURO	PBC_CNY
AL	ALB	Albania			2
AG	ARG	Argentina			70
AU	AUS	Australia	30		200
BR	BRA	Brazil	30		190
BY	BLR	Belarus			20
CN	CAN	Canada	30, standing	standing	
DK	DNK	Denmark	15	15	
EC	ECB	ECB	300, standing		350
HK	HKG	Hong Kong			400
HN	HUN	Hungary		5	10
IC	ISL	Iceland		1.5	3.5
ID	IDN	Indonesia			100
JP	JPN	Japan	120, standing	standing	20
KZ	KAZ	Kazakhstan			7
KO	KOR	Korea	30		360
MX	MEX	Mexico	30		
MY	MYS	Malaysia			180
MG	MNG	Mongolia			10
NW	NOR	Norway	15		
NZ	NZL	New Zealand	15		25
PK	PAK	Pakistan			10
PO	POL	Poland		10	
SD	SWE	Sweden	30		
SP	SIN	Singapore	30		300
SW	CHE	Switzerland	60, standing	standing	
TH	THA	Thailand			70
TK	TUR	Turkey			1.6
UR	UKR	Ukraine			15
UA	UAE	United Arab Emirates			35
UK	GBR	United Kingdom	100, standing	standing	200
UZ	UZB	Uzbekistan			0.7



Swap lines, exposure and market clout

Aizenman and Pasricha (2010)- The selection criteria explaining the U.S. FED supply of bilateral swap lines to 4 selected emerging markets [Brazil, S. Korea, Mexico, Singapore]: Close financial and trade ties,

1. a high degree of financial openness,
2. a relatively good sovereign credit history.

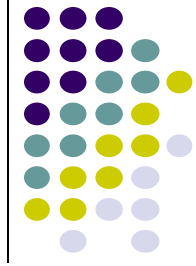
The swap line - part of the bundled of trade-cum-finance-cum-credit package.

Similar factors account for Chinese supply of RMB bilateral swap lines to developing and emerging markets.

Garcia-Herrero and Xia (2013) - The choice of countries signing an RMB-denominated bilateral swap agreement was predominantly by

1. "gravity motifs": country size and distance from China,
2. trade motif exports to China and the existence of an FTA with China.

The logic of bundling



Adams and Yellen (1976): bundling as a manifestation of market clout in which the bundling party leverages its market powers aimed at increasing its surplus.

Nalebuff (2004) Bundling is a particularly effective entry-deterrent strategy.

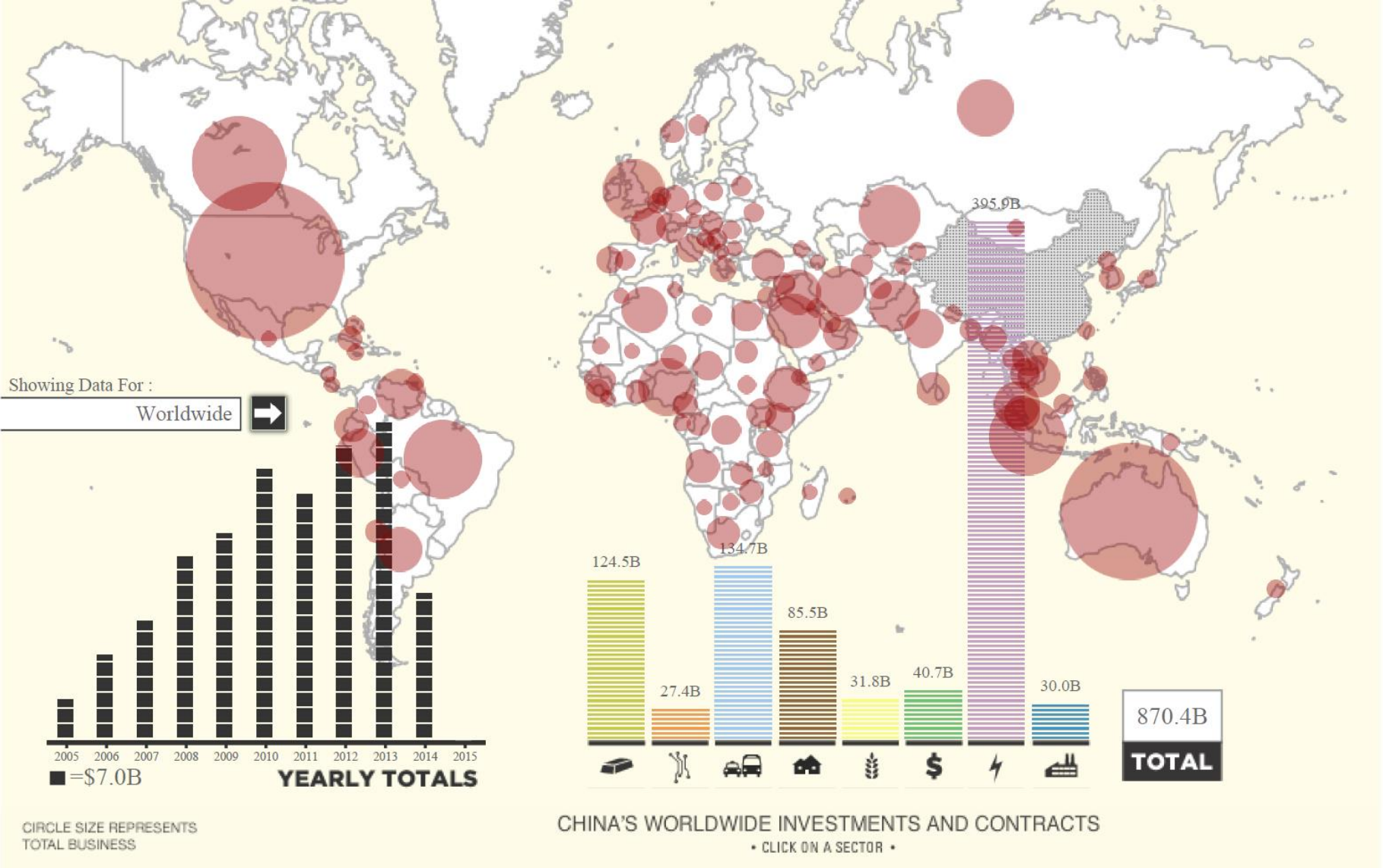
“A monopolist, even without fear of entry, has incentives to bundle, either as a way to achieve better price discrimination or to help save costs. But most important, with market power, is preserving that power, by deterring a potential entrant or reducing the impact of a one-product rival.”

A new chapter of Chinese outward-mercantilism?

A strategy which aims at securing a higher rate of returns on its net foreign asset position, leveraging its success in becoming the global manufacturing hub and the supplier of swap-lines.

In the aftermath of the GFC, China has bundled outward FDI with its finance dealing (lending, swap-lines, trade credit), its trade and foreign investment (exports of Chinese capital products and labor/infrastructure services), and leveraging its growing market clout.

This bundling strategy has been mostly applied to developing and emerging market economies, and to “commodity-countries.” During the GFC and its aftermath, China increased rapidly and in tandem its outward FDI, swap-lines, imports and exports to the selected countries.



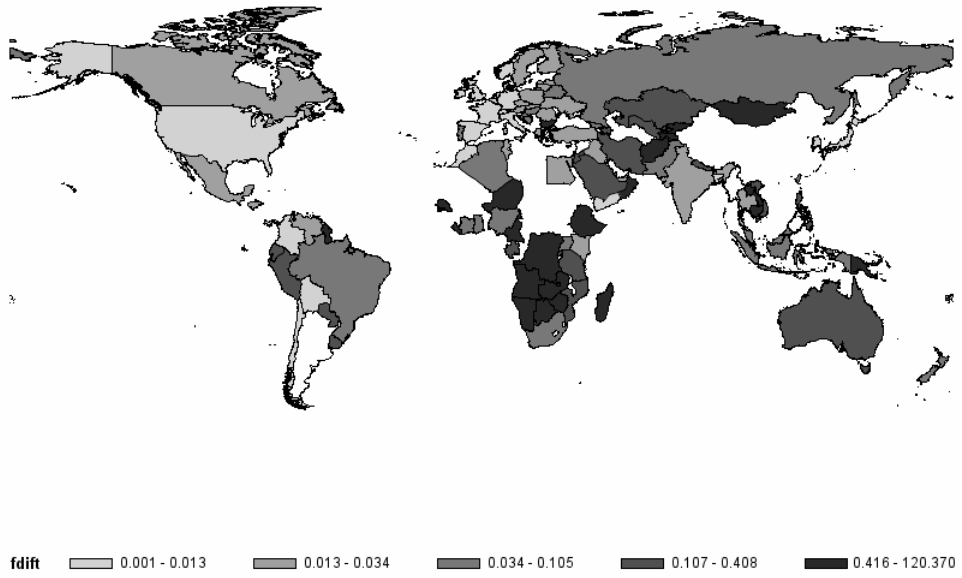
Metals

Tran.

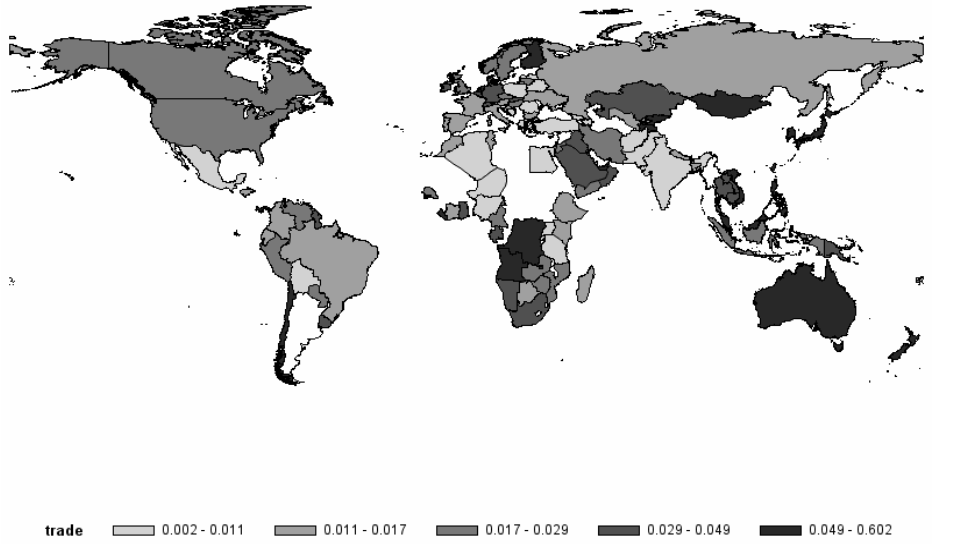
Argi.

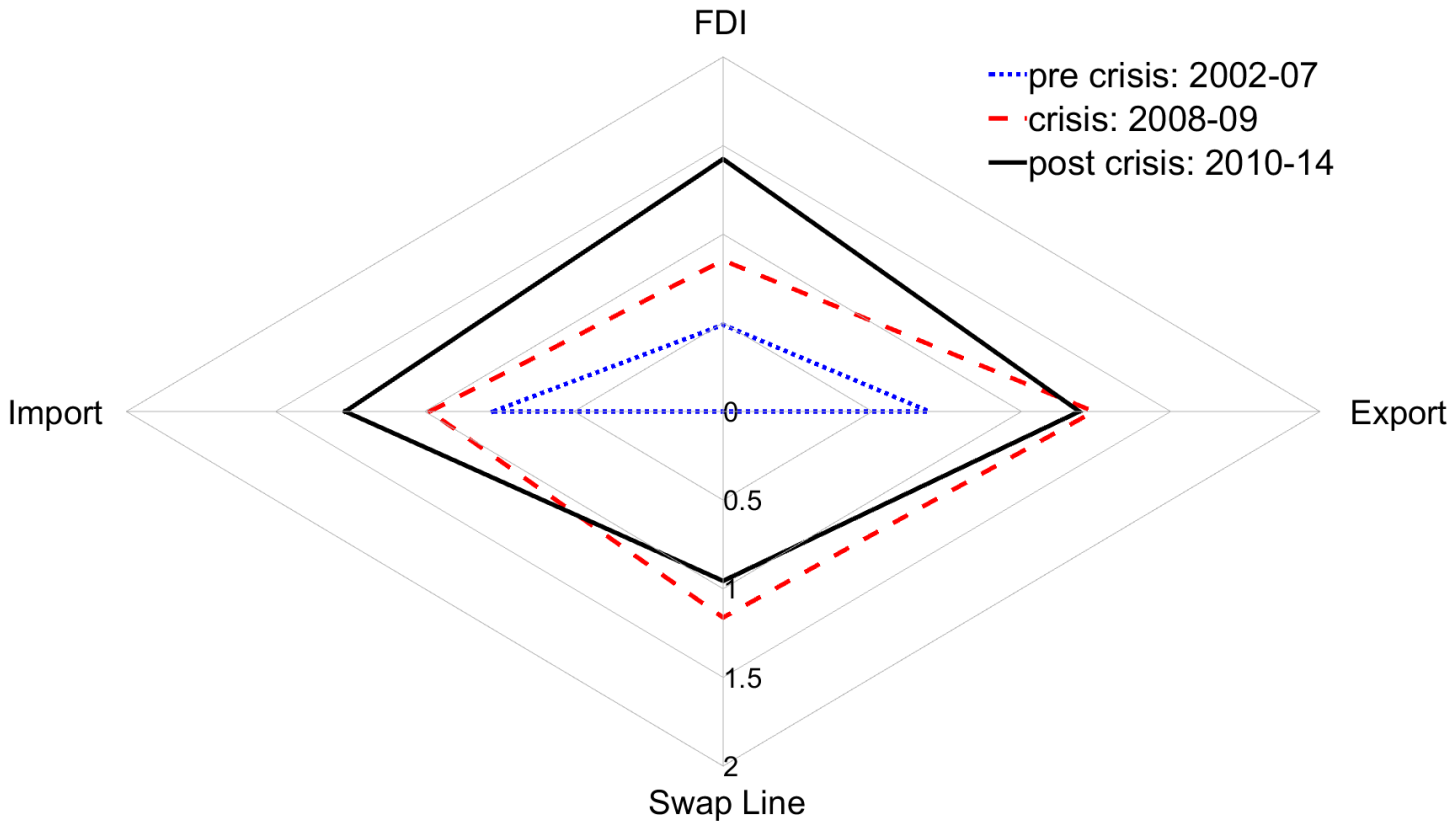
Ener.

Sample means of **greenfield FDI** as a ratio of recipient country's GDP; darker colour corresponds to higher intensity



Sample means of **bilateral trade** as a ratio of recipient country's GDP; darker colour corresponds to higher intensity





The diamond chart plots Chinese Greenfield FDI, exports, imports, and swap-lines, all measured as a ratio of recipient country's GDP, weighted by the sample means. The dotted, dashed and solid lines plot, respectively, the statistics before, during and after the Global Financial Crisis.

We evaluate the association of the various bundling dimensions in regressions that attempt to control of 'gravity' and other factors in two stage regressions, with sectorial disaggregation of the trade and FDI

We identify the positive associations between Chinese outward FDI, trade, and finance.

Commodities imports are positively associated with FDI outflows. Exports of manufactures are negatively associated with FDI outflows.

The positive association between Chinese outward FDI and commodities imports increases with the provision of RMB swap-lines to China's trading partners, and has become stronger since the GFC.

The association of RMB swap-lines with the Chinese outward FDI in the natural resources sector is especially large.

Private vs state-owned Outward FDI (ODI)

Summary of findings:

The positive relation between commodity imports and ODI remains robust regardless of whether the ODI is from private or state-own firms.

The positive relation becomes stronger after the crisis for ODI from private and state-own firms.

The commodity imports increase the ODI by state-own companies more than it does to the ODI by private firms.

	Full Sample		Pre-Crisis (2003-2007)		Crisis (2008-2012)	
	Private	State	Private	State	Private	State
log(Manufactures Exports)	-.17	-.80	-.47	-1.92	.03	.33
	(.25)	(.43)*	(.29)	(.96)**	(.45)	(.98)
log(Commodities Imports)	.43	.50	.31	.10	.48	.87
	(.12)***	(.18)***	(.18)*	(.25)	(.15)***	(.32)***
log(Distance)	-.47	-.72	-.96	-1.86	-.18	-.10
	(.22)**	(.30)**	(.32)***	(.82)**	(.32)	(.47)
log(Host GDP)	.06	.40	.36	2.02	-.10	-1.06
	(.27)	(.55)	(.38)	(1.17)*	(.44)	(1.18)
Constant	5.79	9.06	9.06	9.37	3.34	9.74
	(1.86)***	(2.04)***	(2.54)***	(3.77)**	(2.55)	(3.63)***
Under Id. Test	29.37	10.95	18.80	7.35	20.39	4.31
p value of Under Id. Test	.00	.00	.00	.01	.00	.04
Weak Id. F Statistic	17.72	6.11	17.82	3.17	9.48	2.06
Over Id. F Statistic	.00	.00	.00	.00	.00	.00
Endogeneity Test	9.30	6.47	11.15	6.82	8.38	6.51
p value of Endogeneity Test	.01	.04	.00	.03	.02	.04
R-sq.	.83	.87	.84	.80	.83	.82
Observations	438	316	176	112	262	204

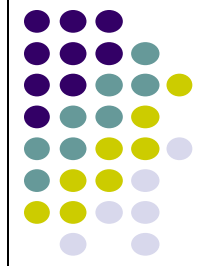
Concluding remarks

In the aftermath of the GFC, Chinese-outward FDI is bundled with trade and financial linkages, thereby increasing the country's influence in the international markets, and securing its long-run access to a stable supply of commodities.

The shortness of the sample, and the lack of more detailed data do not allow us to evaluate the success of the bundling strategy in delivering higher returns to the Chinese net foreign asset position.

The willingness of China to extend credit lines and invest in countries with histories of default [including Argentina, Venezuela, Zimbabwe] raises concerns about the growing exposure of China to sovereign defaults, and the risk of partial nationalization of its outward FDI assets.

Chinese outside exposure is partially hedged



Some Chinese lending to commodity countries is secured by “in kind” long-run payment in the form of oil flows and other commodities to China.

Chinese outside exposure is partially hedged by the growing dependence of some developing countries on Chinese infrastructure services needed to maintain their upgraded rail system, and the growing importance of China as the prime destination of their imports and the “lender of last resort.”

The outcome has been increased access of emerging Africa, S. Asia and LATAM to improved infrastructure services, co-financed and constructed with the help of Chinese capital goods and knowhow, and co-paid by the growing exports of commodities and minerals to China.

The proposed formation of the Asian Infrastructure Investment Bank, in which China would be the main shareholder may be a follow up of this bundling strategy.

http://memegenerator.net/instance/31669615

January 2003 - January 2015

Industry Activity	Capital Investment (million US$)	Employment (persons)	Projects (number)	Companies (number)
Metals	67,972	109,750	240	145
Coal, Oil and Natural Gas	66,794	22,734	101	51
Real Estate	30,523	87,217	61	41
Automotive	29,072	164,061	209	64
Renewable Energy	22,354	5,345	89	59

January 2010 - January 2015 (After the Global Financial Crisis)

Industry Activity	Capital Investment (million US$)	Employment (persons)	Projects (number)	Companies (number)
Metals	25,412	41,166	114	85
Real Estate	23,264	58,499	38	20
Coal, Oil and Natural Gas	20,258	8,837	39	26
Automotive	18,185	101,019	121	45
Renewable energy	16,927	3,748	65	46

Top Companies

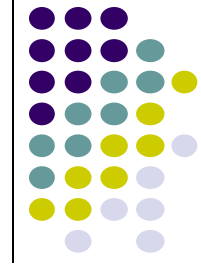
January 2010 - January 2015 (After the Global Financial Crisis)

Investing Company	Capital Investment	Project Date	Industry Activity	*Host Country*	*RMB Swap Line*
Zhejiang Hengyi Group	4,300	Jul-2011	Petroleum refineries	*Brunei*	*No*
China Gezhouba (CGGC)	3,500	Mar-2014	Fossil fuel electric power	*Pakistan*	*Yes*
Shanghai Greenland Group	3,250	Mar-2014	Real Estate	*Malaysia*	*Yes*
Shanghai Greenland Group	3,200	Dec-2014	Commercial & institutional building construction	*South Korea*	*Yes*
MMG	3,000	Apr-2014	Copper, nickel, lead, & zinc mining	*Peru*	*No*
China Triumph International Engineering	3,000	Aug-2014	All other industrial machinery	*Russia*	*Yes*
China Petroleum and Chemical (Sinopec)	2,617	Mar-2011	Petroleum refineries	*Saudi Arabia*	*No*
Chongqing Grain Group	2,536	Apr-2011	Grains & oilseed	*Brazil*	*Yes*
Jinchuan	2,000	Sep-2010	Support Activities for Mining	*Indonesia*	*Yes*
Anshan Iron and Steel Group (Angang)	2,000	Oct-2011	Iron & steel mills & ferroalloy	*India*	*No*

Table 7. PBOC's Renminbi Swap Lines, Trade, and Chinese Outward FDI: The Importance of Commodities Imports for Chinese FDI in Natural Resources Has Become Greater Since the Global Financial Crisis.

Estimation Model with Greenfield FDI Data	Whole Sample		Swap Subsample (year 2009 to 2012)	
	log(Tradable Sector FDI)	log(Natural Resources FDI)	log(Tradable Sector FDI)	log(Natural Resources FDI)
log(Manufactures Exports)	-.68	-1.85	-.14	-.24
	(.29)**	(.65)***	(.51)	(.82)
log(Commodities Imports)	.35	.83	.47	1.43
	(.15)**	(.27)***	(.24)**	(.52)***
log(Manufactures Exports)*Swap	.63	-1.43	.01	-2.79
	(.40)	(.86)*	(.45)	(1.51)*
log(Commodities Imports)*Swap	-.10	1.29	.09	1.10
	(.31)	(.61)**	(.27)	(.65)*
Swap	-4.46	2.89	-.42	17.61
	(2.55)*	(6.75)	(3.15)	(10.97)
log(Distance)	-.41	-1.45	-.18	-1.01
	(.25)	(.46)***	(.34)	(.71)
log(Host GDP)	.53	1.00	.00	-1.11
	(.36)	(.68)	(.63)	(.98)
Impact of Manufactures Exports with swap	-.05	-3.28	-.13	-3.02
p-value	.92	.00	.73	.01
Impact of Commodities Imports with swap	.25	2.12	.56	2.53
p-value	.41	.00	.05	.00
R-sq.	.85	.81	.85	.79
Observations	362	198	183	88

Table 9. Robustness with Additional Control Variables for Explaining Chinese Natural Resources FDI: Commodities Imports and Its Interaction with Swap Lines are the Most Robust Variables. This table reports results of the second-stage least square estimation with additional variables.



Estimation Model with Greenfield FDI Data	log(Natural Resources FDI)		
	2SLS	IV Tobit	IV PPML
log(Manufactures Export)	-1.96	-2.10	-.54
	(.70)***	(.74)***	(.17)***
log(Commodities Import)	.98	1.05	.55
	(.24)***	(.26)***	(.18)***
log(Manufactures Export)*Swap	-1.93	-1.95	1.66
	(.94)**	(.99)**	(.52)***
log(Commodities Import)*Swap	1.59	1.60	-.19
	(.73)**	(.76)**	(.09)**
log(Manufactures Export)*FTA	1.11	1.25	-.50
	(1.23)	(1.29)	(.65)
log(Commodities Import)*FTA	-1.06	-1.19	-.00
	(.98)	(1.02)	(.79)
Swap	5.73	5.80	-14.21
	(6.52)	(6.83)	(4.63)***
FTA	-1.14	-1.22	8.39
	(4.48)	(4.69)	(4.29)*
Impact of Manufactures Exports with Swap	-3.90	-4.05	1.12
p-value	.00	.00	.03
Impact of Commodities Imports with Swap	2.57	2.65	.36
p-value	.00	.00	.05
Impact of Manufactures Exports with FTA	-.85	-.85	-1.05
p-value	.43	.45	.12
Impact of Commodities Imports with FTA	-.08	-.13	.55
p-value	.93	.90	.48
Observations	198	198	198

Baseline Results with Aggregate FDI Flows.

This table provides estimates from the gravity estimation of China's aggregate bilateral FDI and bilateral trade. All non-discrete variables are measured in logs. Total Trade is the sum of bilateral exports and imports between China and the host country (trading partner).

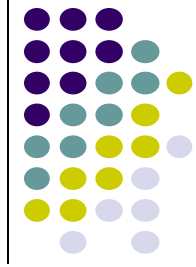
Estimation Model with Aggregate FDI Data	Gravity Model		Gravity Models with Instrumented Trade Variables				
			1st Stage	2nd stage	1st Stage		2nd stage
	log(FDI)	log(FDI)	log(Total Trade)	log(FDI)	Log(Exports)	Log(Imports)	log(FDI)
log(Total Trade)	.47			1.15			
	(.09)***			(.42)***			
Log(Exports)		.42					.10
		(.10)***					(.35)
Log(Imports)		.23					1.11
		(.06)***					(.24)***
log(distance)	-.54	-.45	-.59	-.13	-.57	-.61	-.23
	(.16)***	(.16)***	(.08)***	(.28)	(.07)***	(.12)***	(.29)
log(Host GDP)	-.07	-.28	.70	-.69	.73	.71	-.90
	(.09)	(.11)**	(.05)***	(.39)*	(.05)***	(.08)***	(.42)**
Legal origin - FR	-.88	-.84	-.22	-.77	-.22	-.12	-.69
	(.18)***	(.18)***	(.10)**	(.22)***	(.08)***	(.14)	(.24)***
Legal origin - GE	-1.21	-1.24	.39	-1.49	-.20	1.47	-2.19
	(.34)***	(.34)***	(.17)**	(.39)***	(.15)	(.26)***	(.46)***
Legal origin - SC	-1.76	-2.14	-2.95	.35	.14	.51	-4.10
	(.42)***	(.42)***	(.49)***	(1.51)	(.50)	(.86)	(1.33)***
Legal origin - SO	-.80	-.82	-.32	-.52	-.06	-.27	-.52
	(.24)***	(.23)***	(.12)**	(.30)*	(.10)	(.18)	(.30)*
Common language	.86	.56	1.35	-.12	1.04	2.38	-.13
	(.36)**	(.37)	(.18)***	(.71)	(.19)***	(.33)***	(.76)
log(Host Transport Intensity)			.23		.26	.24	
			(.05)***		(.04)***	(.07)***	
log(Host Geographic Size)					-.08	.22	
					(.02)***	(.04)***	
Constant	4.53	5.34	3.25	4.27	2.68	-1.05	8.74
	(1.56)***	(1.56)***	(.82)***	(1.96)**	(.68)***	(1.18)	(1.97)***
Under Id. Test				21.86			34.76
p value of Under Id. Test				.00			.00
Weak Id. F Statistic				22.06			18.05
Endogeneity Test				7.53			14.07
p value of Endogeneity Test				.01			.00
R-sq.	.46	.47	.99	.86	.99	.98	.82
Observations	470	468	445	445	443	443	443

Before and After the Global Financial Crisis: Stronger Relationship between Chinese Natural Resources FDI and Commodities Imports After the Crisis.

This table provides the second-stage gravity estimation results from two-stage ordinary least square estimation of China's sectoral Greenfield FDI before and after the GFC of 2008-09. The pre-Crisis subsample includes all observations from year 2003 to 2007, while the post-crisis sample includes all observations from 2010 to 2012. Manufactures Exports and Commodities Imports (endogenous regressors) are instrumented with Transport Intensity, Geographic Size of host countries, and gravity variables (as included in Table 3). All regressions control for year fixed effect.

Estimation Model with Greenfield FDI Data	log(Tradable Sector FDI)		log(Nontradable Sector FDI)		log(Natural Resources FDI)	
	Pre Crisis	Post Crisis	Pre Crisis	Post Crisis	Pre Crisis	Post Crisis
log(Manufactures Exports)	-.73	-.02	-.09	.63	-3.90	-.74
	(.35)**	(.67)	(.32)	(.62)	(1.74)**	(.67)
log(Commodities Imports)	.22	.43	.20	.08	.76	1.67
	(.20)	(.24)*	(.27)	(.18)	(.44)*	(.57)***
log(Distance)	-.69	-.45	-.87	-.13	-3.28	-.98
	(.37)*	(.45)	(.39)**	(.41)	(1.35)**	(.82)
log(Host GDP)	.62	-.07	.06	-.28	3.62	-1.05
	(.49)	(.81)	(.50)	(.66)	(1.92)*	(.80)
Constant	5.81	6.17	9.34	2.05	11.89	20.60
	(2.83)**	(3.71)*	(3.39)***	(2.50)	(6.17)*	(9.72)**
R-sq.	.81	.86	.83	.88	.66	.77
Observations	135	142	121	137	80	63

Similar factors account for Chinese supply of RMB bilateral swap lines to a growing list of developing and emerging markets



Garcia-Herrero and Xia (2013) - The choice of countries signing an RMB-denominated bilateral swap agreement with China was predominantly by

1. “gravity motifs”: country size and distance from China,
2. trade motif exports to China and the existence of an FTA with China.
3. Institutional soundness - countries with better government and less corruption are more likely to sign an RMB-denominated bilateral swap agreement.